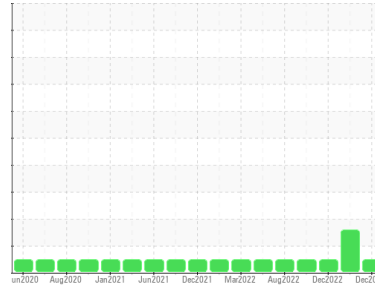




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Area  
**(C-GNNR)**  
Machine Id  
**BEECHCRAFT PCEHA0248**  
Component  
**Left Jet Turbine**  
Fluid  
**EASTMAN TURBO OIL 2380 (--- GAL)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.  
NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

### Wear

All component wear rates are normal. The ferrography results are normal indicating no abnormal wear in the system.

### Contaminants

The water content is negligible. There is no indication of any contamination in the oil.

### Oil Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>WC0886036</b>	WC0865631	WC0751574
Sample Date	Client Info		<b>20 Dec 2023</b>	17 Nov 2023	12 Dec 2022
TSN	hrs	Client Info	<b>4511</b>	4422	4188
TSO	hrs	Client Info	<b>214</b>	125	4188
Oil Age	hrs	Client Info	<b>214</b>	125	2737
Oil Changed		Client Info	<b>Not Changed</b>	Not Changed	Not Changed
Sample Status			<b>NORMAL</b>	MARGINAL	NORMAL

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >8	<b>0</b>	0	<1
Chromium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Nickel	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Silver	ppm	ASTM D5185(m) >2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m) >2	<b>&lt;1</b>	0	<1
Lead	ppm	ASTM D5185(m) >3	<b>0</b>	0	0
Copper	ppm	ASTM D5185(m) >3	<b>0</b>	<1	0
Tin	ppm	ASTM D5185(m) >2	<b>0</b>	0	0
Antimony	ppm	ASTM D5185(m)	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Beryllium	ppm	ASTM D5185(m)	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)	<b>0</b>	0	0

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m) 0	<b>0</b>	<1	1
Barium	ppm	ASTM D5185(m) 0	<b>0</b>	<1	0
Molybdenum	ppm	ASTM D5185(m) 0	<b>0</b>	0	0
Manganese	ppm	ASTM D5185(m)	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185(m) 0	<b>2</b>	0	0
Calcium	ppm	ASTM D5185(m) 0	<b>2</b>	0	0
Phosphorus	ppm	ASTM D5185(m) 2500	<b>2784</b>	2715	2763
Zinc	ppm	ASTM D5185(m) 0	<b>2</b>	1	1
Sulfur	ppm	ASTM D5185(m) 0	<b>0</b>	6	2
Lithium	ppm	ASTM D5185(m)	<b>&lt;1</b>	<1	<1

## CONTAMINANTS

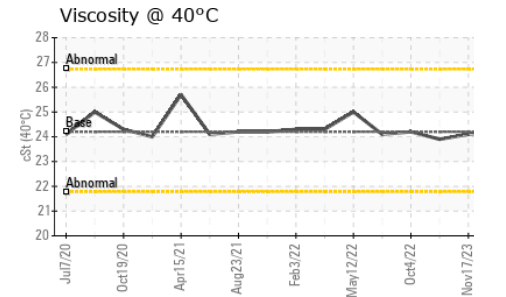
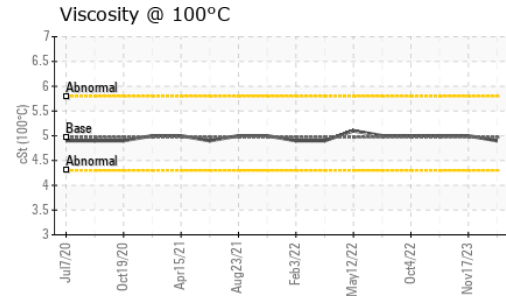
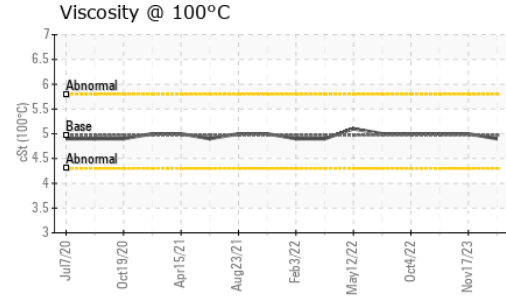
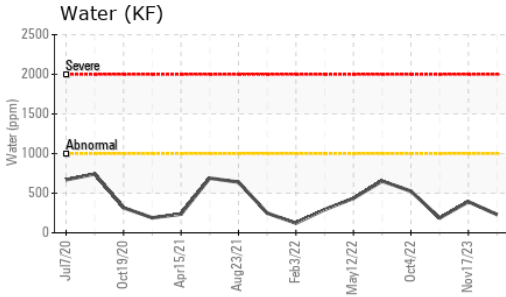
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >8	<b>2</b>	4	4
Sodium	ppm	ASTM D5185(m)	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185(m) >20	<b>&lt;1</b>	0	0
Water	%	ASTM D6304* >0.1	<b>0.023</b>	0.039	0.018
ppm Water	ppm	ASTM D6304* >1000	<b>230</b>	393	187.0

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974* 0.43	<b>0.44</b>	0.33	0.24



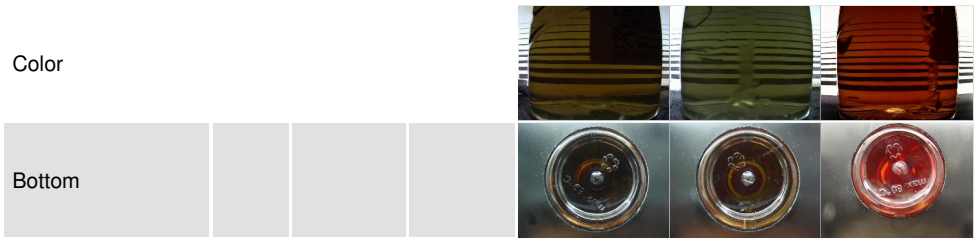
# OIL ANALYSIS REPORT



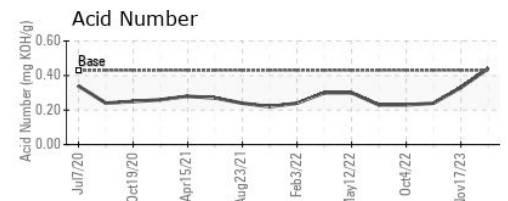
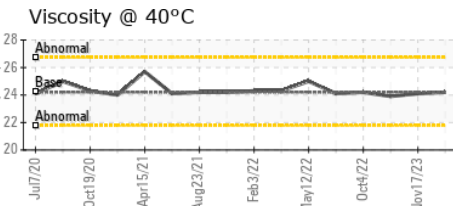
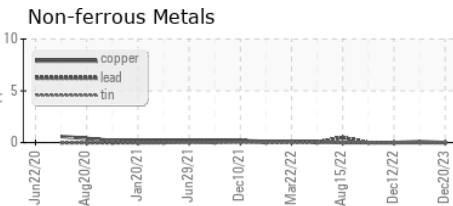
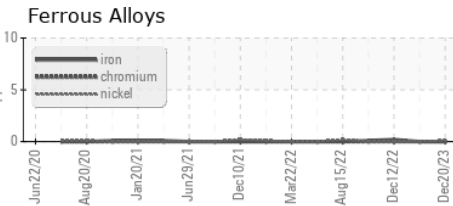
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	Visual*	NONE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE
Silt	scalar	Visual*	NONE	NONE	NONE
Debris	scalar	Visual*	NONE	NONE	NONE
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE
Appearance	scalar	Visual*	NORML	NORML	NORML
Odor	scalar	Visual*	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.1	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D7279(m)	24.2	24.1	23.9
Visc @ 100°C	cSt	ASTM D7279(m)	4.97	5	5
Viscosity Index (VI)	Scale	ASTM D2270*	134	137	140

SAMPLE IMAGES	method	limit/base	current	history1	history2
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## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0886036 **Received** : 22 Dec 2023  
**Lab Number** : 02604944 **Diagnosed** : 04 Jan 2024  
**Unique Number** : 5698029 **Diagnostician** : Kevin Marson  
**Test Package** : AVI 3

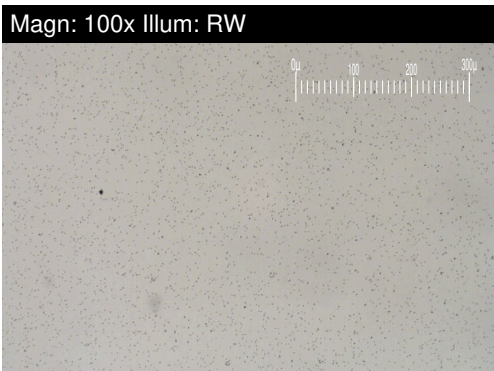
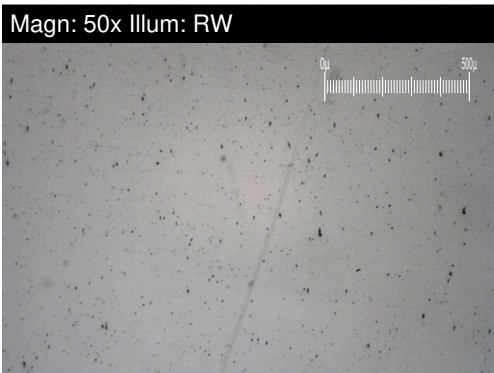
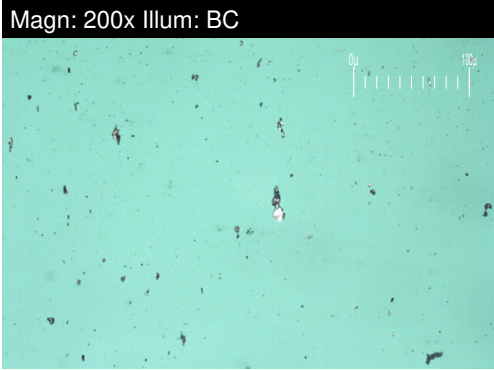
To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.

**Skynorth Air**  
 175 West Hangar Road  
 Winnipeg, MB  
 CA R3J 3Z1  
 Contact: Rowena Roopchand  
 parts@skynorthair.com  
 T: (204)338-8039  
 F:



# FERROGRAPHY REPORT

Area  
**(C-GNNR)**  
 Machine Id  
**BEECHCRAFT PCEHA0248**  
 Component  
**Left Jet Turbine**  
 Fluid  
**EASTMAN TURBO OIL 2380 (--- GAL)**

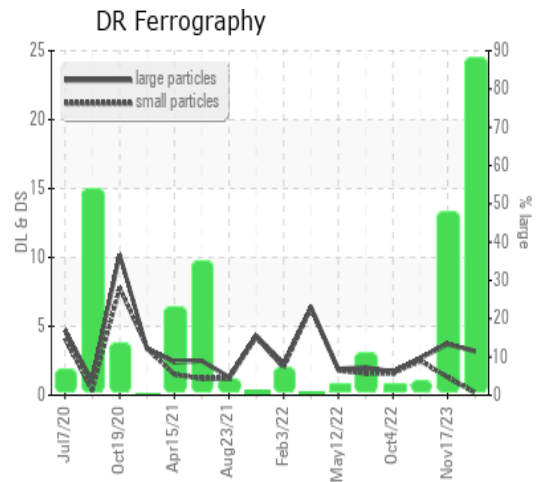


DR-FERROGRAPHY		method	limit/base	current	history1	history2
Large Particles		DR-Ferr*		<b>3.2</b>	3.7	2.7
Small Particles		DR-Ferr*		<b>0.2</b>	1.3	2.5
Total Particles		DR-Ferr*	>---	<b>3.4</b>	5	5.2
Large Particles Percentage	%	DR-Ferr*		<b>88.2</b>	48	3.8
Severity Index		DR-Ferr*		<b>10</b>	9	1

FERROGRAPHY		method	limit/base	current	history1	history2
Ferrous Rubbing	Scale 0-10	ASTM D7684*		<b>2</b>	2	2
Ferrous Sliding	Scale 0-10	ASTM D7684*			1	
Ferrous Cutting	Scale 0-10	ASTM D7684*			▲ 1	
Ferrous Rolling	Scale 0-10	ASTM D7684*		1	1	1
Ferrous Break-in	Scale 0-10	ASTM D7684*				
Ferrous Spheres	Scale 0-10	ASTM D7684*				
Ferrous Black Oxides	Scale 0-10	ASTM D7684*				
Ferrous Red Oxides	Scale 0-10	ASTM D7684*				
Ferrous Corrosive	Scale 0-10	ASTM D7684*				
Ferrous Other	Scale 0-10	ASTM D7684*				
Nonferrous Rubbing	Scale 0-10	ASTM D7684*				
Nonferrous Sliding	Scale 0-10	ASTM D7684*				
Nonferrous Cutting	Scale 0-10	ASTM D7684*				
Nonferrous Rolling	Scale 0-10	ASTM D7684*				
Nonferrous Other	Scale 0-10	ASTM D7684*				
Carbonaceous Material	Scale 0-10	ASTM D7684*				
Lubricant Degradation	Scale 0-10	ASTM D7684*				
Sand/Dirt	Scale 0-10	ASTM D7684*		1	1	1
Fibres	Scale 0-10	ASTM D7684*				
Spheres	Scale 0-10	ASTM D7684*				
Other	Scale 0-10	ASTM D7684*		1	1	1

## WEAR

All component wear rates are normal.  
 The ferrography results are normal indicating no abnormal wear in the system.



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